Vaccine Hesitancy and COVID-19 Vaccine

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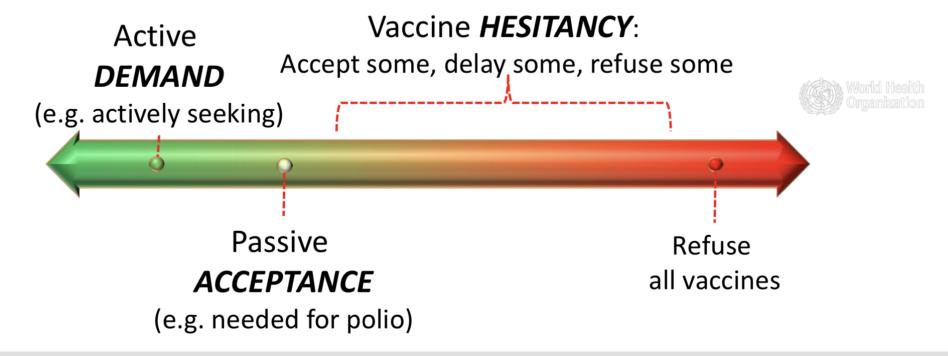
Vaccine Hesitancy

Delay in acceptance or **refusal** of vaccination **despite** availability of vaccination services. Vaccine hesitancy is complex and context specific, varying across time, place and vaccines.

It is influenced by factors such as complacency, convenience and confidence.

Core concepts: A continuum of attitudes and behaviours





Vaccine hesitancy: a delay in acceptance or refusal of vaccines, despite available services.

Is complex and context specific, varying across time, place, and vaccine

Dimensions of Vaccine Hesitancy- WHO

Vaccine Hesitancy

Confidence

Trust in the effectiveness and safety of vaccines, the system that delivers vaccines, and the motives of those who establish policies on necessary vaccines.

Complacency

Perception that risks of vaccine preventable disease are low and vaccines are not a necessary preventative

Convenience

The extent to which vaccines are available, affordable, accessible,

Influences

Socio-Ecological Model



Infodemic

Infodemic is a blend of "information" and "epidemic" that typically refers to a rapid and far-reaching spread of both accurate and inaccurate information about something, such as a disease. As facts, rumors, and fears mix and disperse, it becomes difficult to learn essential information about an issue.

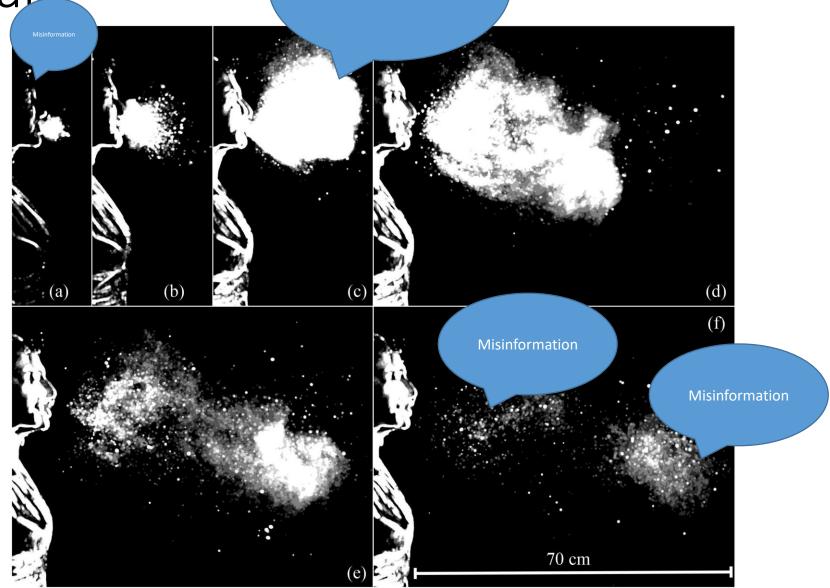
- Merriam-Webster Words We are Watching

"A few facts, mixed with fear, speculation and rumor, amplified and relayed swiftly worldwide by modern information technologies, have affected national and international economies, politics and even security in ways that are utterly disproportionate with the root realities."

- When the Buzz Bites Back By David J. Rothkopf May 11, 2003 Washington Post

Outbreak

Misinformation



The Problem: COVID-19

- Deliberate attempts to disseminate wrong information to undermine the public health response and advance alternative agendas of groups or individuals.
- Mis- and disinformation can be harmful to people's physical and mental health; increase stigmatization; threaten precious health gains; and lead to poor observance of public health measures, thus reducing their effectiveness and endangering countries' ability to stop

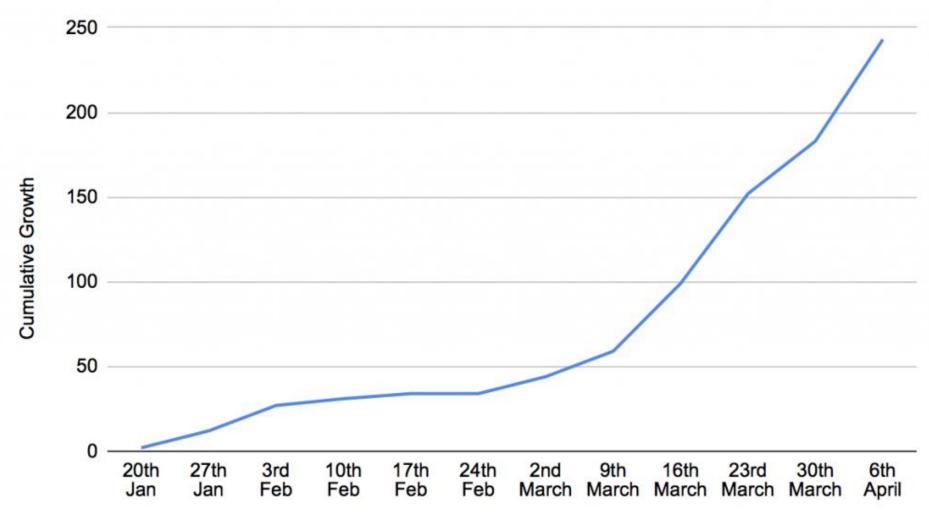
the pandemic.

COVID-19

Image Source: KPBS.org

Source: Managing the COVID-19 infodemic: Promoting healthy behaviours and mitigating the harm from misinformation and disinformation Joint statement by WHO, UN, UNICEF, UNDP, UNESCO, UNAIDS, ITU, UN Global Pulse, and IFRC

Cumulative Weekly Growth in Misinformation Stories(N=243)



http://joyojeet.people.si.umich.edu/temporal-patterns-in-covid-19-misinformation-in-india/

Figure 2: Reconfigured vs fabricated misinformation

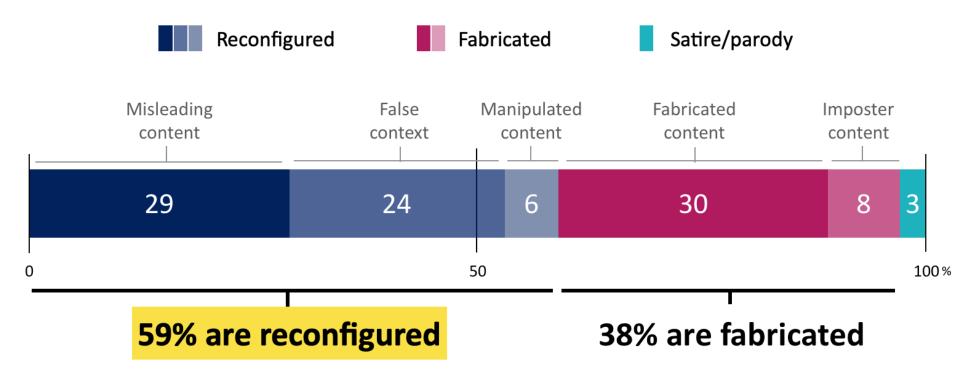


Figure 2 shows the proportion of reconfigured (N=133) and fabricated (N=86) misinformation in the sample (N=225) and the types of misinformation that constitute both reconfigured and fabricated misinformation.



Source: https://reutersinstitute.politics.ox.ac.uk/types-sources-and-claims-covid-19-misinformation

Cause & Contributing Factors

Coronavirus misinformation: quantifying sources and themes in the COVID-19 'infodemic'

Sarah Evanega^{1,3}, Mark Lynas¹, Jordan Adams², Karinne Smolenyak²

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The COVID-19 Social Media Infodemic

Matteo Cinelli¹, Walter Quattrociocchi*^{2,1,3}, Alessandro Galeazzi⁴, Carlo Michele Valensise⁵, Emanuele Brugnoli¹, Ana Lucia Schmidt², Paola Zola⁶, Fabiana Zollo^{2,1}, and Antonio Scala^{1,3}

¹CNR-ISC, Roma ²Universit Ca Foscari di Venezia ³Big Data in Health Society, Roma ⁴Universit di Brescia ⁵Politecnico di Milano ⁶CNR-IIT, Pisa **Financial Gain**

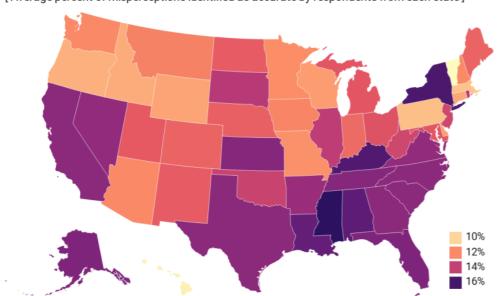
Political Gain

Experimental Manipulation

THE STATE OF THE NATION: A 50-STATE COVID-19 SURVEYREPORT #14: MISINFORMATION AND VACCINE ACCEPTANCE

COVID-19 misperceptions by state

[Average percent of misperceptions identified as accurate by respondents from each state]



National sample, N = 21,196, Time period: 8/7/2020-8/26/2020

Source: The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States (A joint project of: Northeastern University, Harvard University, Rutgers University, and Northwestern University) www.covidstates.org

• Created with Datawrapper



Racial and Ethnic Minorities

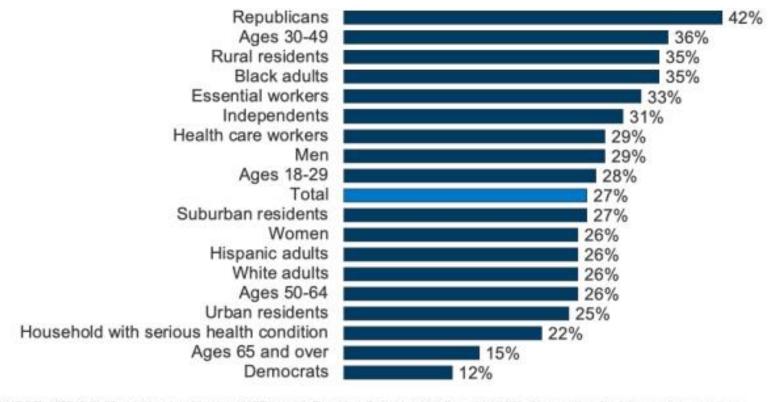
MIM apps

https://news.northeastern.edu/wp-content/uploads/2020/09/COVID19-CONSORTIUM-REPORT-14-MISINFO-SEP-2020-2.pdf

Figure 4

Which Groups Are Most Likely To Be COVID-19 Vaccine Hesitant?

Percent within each group who say, if a COVID-19 vaccine was determined to be safe by scientists and available for free to everyone who wanted it, they would **probably not get it** or **definitely not get it**:



KFF COVID-19 Vaccine Monitor

SOURCE: KFF COVID-19 Vaccine Monitor (KFF Health Tracking Poll, Nov. 30-Dec. 8, 2020). See topline for full question wording.

Figure 12

Profile Of Groups By Vaccine Enthusiasm

When a vaccine for COVID-19 is approved and widely available to anyone who wants it, do you think you will...?

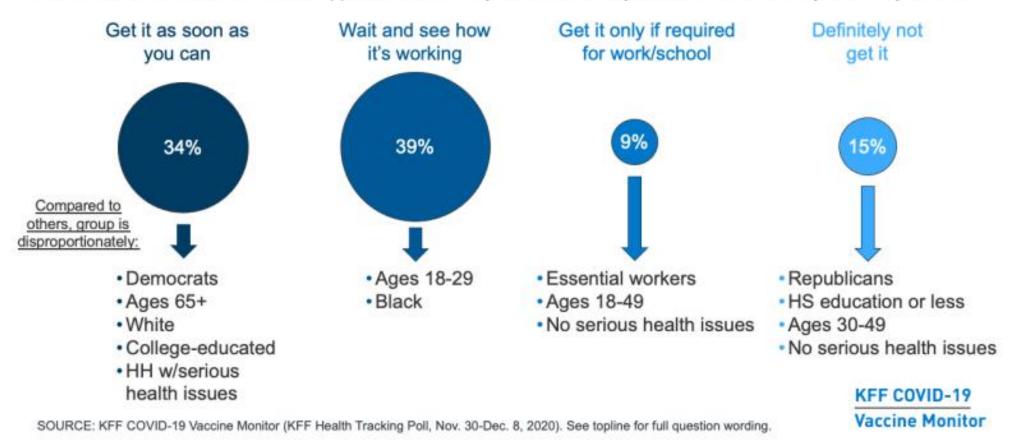
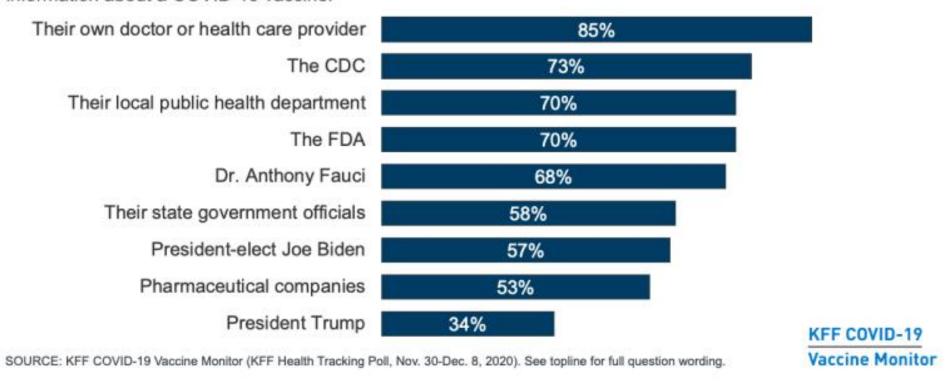


Figure 15

Personal Health Care Providers Are Most Trusted Source Of Information On COVID-19 Vaccine

Percent who say they have a great deal or a fair amount of trust in each of the following to provide reliable information about a COVID-19 vaccine:



Communication

Start early

Present vaccine as default

Be honest and reassure about side effects/risks

Tell stories, not just data

Build trust

Address pain

Focus on protection of individual and community

Provide emotional support

Have conversations- ask why and provide information

Partner with communities and community leaders

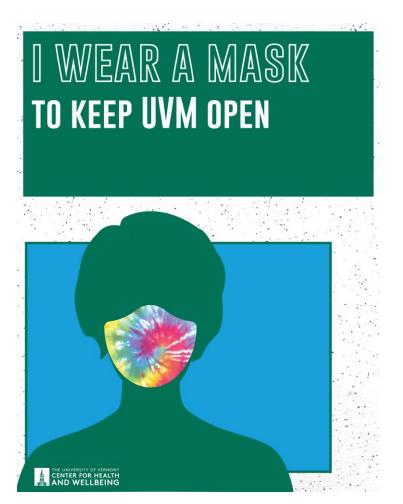
Correct the Misinformation

WHO's Covid-19 Myth-busters Amid various myths doing the rounds after the coronavirus global outbreak, the World Health Organization has released a list of myth-busters Can be transmitted through mosquito bites Can be transmitted through goods No information or evidence available Very unlikely that the virus will persist on a surface after being moved, Taking a hot bath travelled, and prevents disease taking exposed Cold weather and a hot bath with snow kill virus extremely hot water can be harmful **FACTS** no reason to believe taking a hot bath with that cold weather can extremely hot water Spraying alcohol or ₩三線 can be harmful kill the virus chlorine kills virus Spraying alcohol or chlorine won't help kill viruses Thermal scanners substances can be harmful effective in detection to clothes/ mucous Yes but they cannot detect people who are infected but are not yet **UV** disinfection sick with fever lamps' use Hand-dryers kill Should not be used to the virus sterilize hands or other areas of skin as they can Hand dryers are not Antibiotics prevent cause irritations effective in killing and treat virus 2019-nCov Antibiotics do not work against viruses, only **Garlic consumption** prevents infection No evidence from the Pneumonia vaccine current outbreak prevents infection Pneumococcal vaccine and Haemophilus influenza type B (Hib) vaccine spread virus do not provide Older people are more protection susceptible No evidence It can affect people of all ages. people with pre-existing medical conditions (such as asthma, Regularly rinsing NOTE: Till date, there is no diabetes, heart disease) the nose with specific medicine recommended appear to be more saline water vulnerable to prevent or treat the new No evidence coronavirus (2019-nCoV) disease

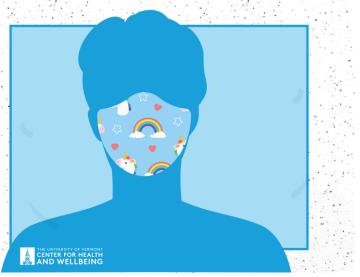
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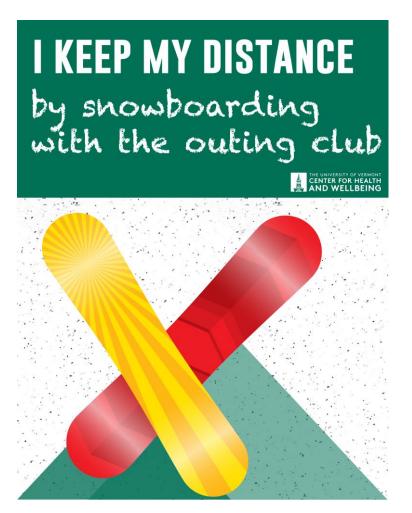
https://www.hindustantimes.com/indianews/here-s-why-coronavirus-testing-takes-15-minutes-in-china-and-a-day-in-india/storynefuBjex5oSLXy8WbLPqVL.html

Change the behavior









Combat the Source



As the world responds to the COVID-19 pandemic, we face the challenge of an overabundance of information related to the virus. Some of this information may be false and potentially harmful.

Inaccurate information spreads widely and at speed, making it more difficult for the public to identify verified facts and advice from trusted sources, such as their local health authority or WHO.

However, everyone can help to stop the spread. If you see content online that you believe to be false or misleading, you can report it to the hosting social media platform.



Other Resources

• BBC Stop the Spread:

https://www.bbc.com/reel/video/p088bh94/coronavirus-how-to-stop-the-spread-of-misinformation-

Treat Infodemic as an Outbreak

Collect ongoing data

Urgency

Devote resources

Ask questions

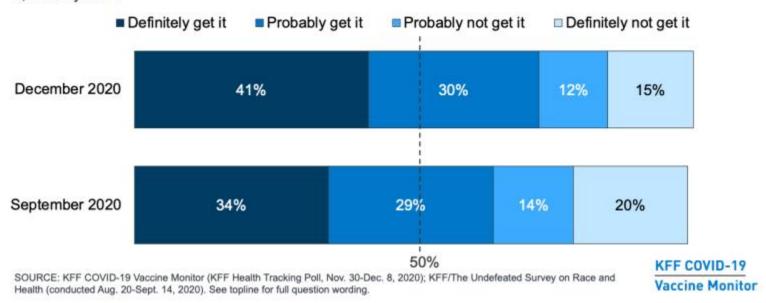
Involve partners

Goon News!

Figure 1

Share Saying They Would Get A COVID-19 Vaccine If It Were Free And Deemed Safe By Scientists Has Increased Since September

If a COVID-19 vaccine was determined to be safe by scientists and available for free to everyone who wanted it, would you...?

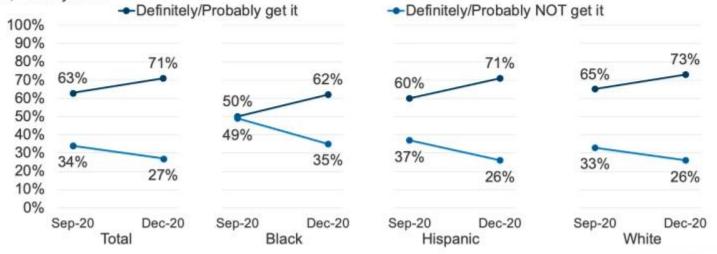


More Good News!

Figure 2

Willingness To Get COVID-19 Vaccine Has Increased Across Racial/Ethnic Groups

If a COVID-19 vaccine was determined to be safe by scientists and available for free to everyone who wanted it, would you...?



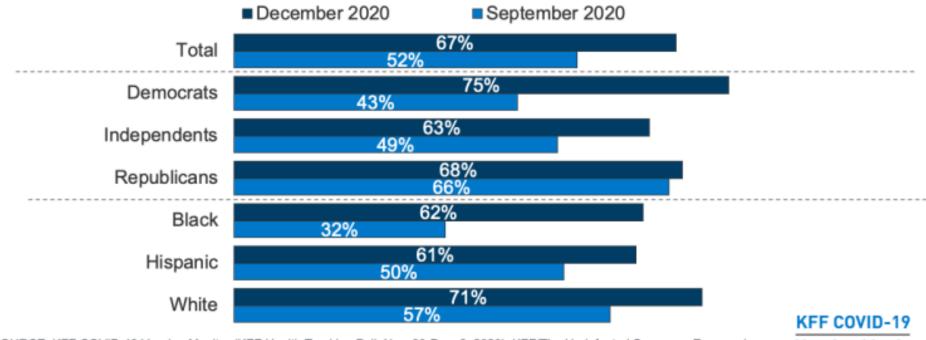
SOURCE: KFF COVID-19 Vaccine Monitor (KFF Health Tracking Poll, Nov. 30-Dec. 8, 2020); KFF/The Undefeated Survey on Race and Health (conducted Aug. 20-Sept. 14, 2020). See topline for full question wording.

KFF COVID-19 Vaccine Monitor

Figure 6

Confidence That COVID-19 Vaccine Will Be Fairly Distributed Has Increased Since September, Particularly Among Black Adults

Percent who say they are **very** or **somewhat confident** that when a COVID-19 vaccine becomes available, it will be **distributed in a way that is fair**:



SOURCE: KFF COVID-19 Vaccine Monitor (KFF Health Tracking Poll, Nov. 30-Dec. 8, 2020); KFF/The Undefeated Survey on Race and Health (conducted Aug. 20-Sept. 14, 2020). See topline for full question wording.

Vaccine Monitor